Isle Royale National Park, Accuracy Assessment Metadata

Identification_Information:
Citation:
Citation_Information:
Originator: U.S. Geological Survey
Originator: Department of the Interior
Publication_Date: 200108
Title: Isle Royale National Park Accuracy Assessment
Geospatial_Data_Presentation_Form: database and report
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Isle Royale National Park
Publication_Information:
Publication_Place: Denver, CO
Publisher:
USGS Biological Resources Division, Center for
Biological Informatics
Online_Linkage: http://biology.usgs.gov/npsveg/isro/index.html#accuracy_assessment_info
Description:
Abstract:
The accuracy assessment field work was performed in July - September, 1998 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Isle Royale National Park The data points were randomly distributed stratified according to vegetation association over the project area according to protocols developed by the Program. Points were located by GPS navigation and the community information was collected at the point, without knowledge of the attributes of the vegetation spatial data.
Purpose:
To verify the accuracy of the mapped vegetation communities at Isle Royale National Park
Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 199810
Currentness_Reference: Source of data collection
Status:
Progress: Complete
Maintenance_and_Update_Frequency: None planned
Spatial_Domain:
Bounding_Coordinates:
West_Bounding_Coordinate: -89.125
East_Bounding_Coordinate: -88.4
North_Bounding_Coordinate: 48.2
South_Bounding_Coordinate: 47.8
Description_of_Geographic_Extent: Isle Royale National Park, Michigan
Keywords:
Theme:
Theme_Keyword_Thesaurus: None
Theme_Keyword: National Park Service
Theme_Keyword: U.S. Geological Service
Theme_Keyword: The Nature Conservancy
Theme_Keyword: Aerial Information Systems
Theme_Keyword: Center for Biological Informatics
Theme_Keyword: land cover
Theme_Keyword: vegetation

Theme_Keyword: community
Theme_Keyword: association
Theme_Keyword: land use
Theme_Keyword: Environmental System Research Institute
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: Isle Royale National Park
Place_Keyword: Michigan
Place_Keyword: Lake Superior
Temporal:
Temporal_Keyword_Thesaurus: None
Temporal_Keyword: Data Represents May 1996 and August 1994
Access_Constraints: None
Use_Constraints:
Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analysis. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations should be given to the U.S. Geological Survey and the National Park Service.
Point_of_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization: USGS Biological Resources Division, Center for Biological Informatics
Contact_Address:
Address_Type: Physical Address
Address: USGS
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Browse_Graphic:
Browse_Graphic_File_Name: http://biology.usgs.gov/npsveg/isro/images/isroaa.jpg
Browse_Graphic_File_Description: 184 kb
Browse_Graphic_File_Type: JPEG
Taxonomy:
Keywords/Taxon:
Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: Standard National Vegetation Classification System
Taxonomic_Keywords: plant communities
General_Taxonomic_Coverage:
Vegetation Alliances of the National Vegetation

Classification System (October 1995)
Taxonomic_Classification:
Taxon_Rank_Name: Kingdom
Taxon_Rank_Value: Plantae
Applicable_Common_Name: plants

Data_Quality_Information:
Attribute_Accuracy:
Attribute_Accuracy_Report:
The attributes for the accuracy assessment were recorded in the field in July - September, 1998. Vegetation associations were identified based on the field key and plant identification. If additional communities were found within a 50 meter radius of the plot center, they were recorded as well. During the analysis, it was concluded that some attributes were in error and changed to match the mapped attributes. This was done by examination of the aerial photographs under stereoscopic view. The attributes were in error due to 1) spatial error in the GPS derived coordinates (4-8 meters), 2) change of vegetation community due to temporal changes, or differences between observation team identifications.
Logical_Consistency_Report:
All attributes are codes that correspond to vegetation communities and have been checked for typographical and logical errors.
Completeness_Report: All points were collected and analyzed
Positional_Accuracy:
Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report:
The points were located using a military-style GPS receiver (PLGR), which has a published accuracy of 4-8 meters.
Vertical_Positional_Accuracy:
Vertical_Positional_Accuracy_Report: Not applicable
Lineage:
Methodology:
Methodology_Type: Field
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: Accuracy Assessment
Methodology_Description:
Data points were located by use of a PLGR GPS receiver. Vegetation communities were identified on the basis of a dichotomous field key and plant Species: present
Methodology:
Methodology_Type: Lab
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: Accuracy Assessment
Methodology_Description:
Accuracy assessment points were compiled into an ARCINFO point coverage and intersected with the vegetation community coverage. The resulting INFO file was exported into a text file, imported into a spreadsheet, and the attributes from the accuracy assessment and the spatial data were compared. If the attributes did not compare, an analysis of the mismatch was made and either the AA attribute or the map attribute was changed based on identification of the community on the aerial photo.
Source_Information:
Source_Citation:
Citation_Information:
Originator: U.S. National Biological Survey
Originator: U.S. National Park Service
Originator: Department of the Interior
Publication_Date: 199411

Title: Accuracy Assessment Procedures, NBS/NPS Vegetation Mapping Program
Geospatial_Data_Presentation_Form: procedure report
Publication_Information:
Publication_Place: Denver, CO
Publisher:
USGS, Biological Resources Division, Center for Biological Informatics
Other_Citation_Details:
Prepared by: Environmental Systems Research Institute; Redlands, CA and National Center for Geographic Information and Analysis, University of California, Santa Barbara, CA and The Nature Conservancy, Arlington, VA under contract from U.S. Department of the Interior National Biological Survey and National Park Service.
Type_of_Source_Media: electronic document
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 199411
Ending_Date: Present
Source_Currentness_Reference: publication date
Source_Citation_Abbreviation: Veg Mapping Program Accuracy Assessment Procedures
Source_Contribution:
The vegetation spatial data were tested for accuracy with the AA data.
Process_Step:
Process_Description:
The accuracy assessment field work was performed in July - September, 1998 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Isle Royale National Park. The data points were randomly distributed stratified according to vegetation association over the project area according to protocols developed by the Program. Points were located by GPS navigation and the community information was collected at the point, without knowledge of the attributes of the vegetation spatial data.
Source_Used_Citation_Abbrevation:
Spatial data of vegetation communities for Isle Royale National Park.
Source_Used_Citation_Abbrevation: Accuracy Assessment Procedure Document
Process_Date: 199810

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Point

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 16
Transverse_Mercator:
Scale_Factor_at_Central_Meridian: 0.9996
Longitude_of_Central_Meridian: -105
Latitude_of_Projection_Origin: 0
False_Easting: 0
False_Northing: 0
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 371.951 m
Ordinate_Resolution: 371.951 m

Planar_Distance_Units: meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 297.257

Entity_and_Attribute_Information:
Overview_Description:
Entity_and_Attribute_Overview:
The National Vegetation Classification Standard is organized hierarchically to support conservation and resource stewardship applications across multiple scales. The upper levels of the hierarchy are based on the physical form or structure of the vegetation (physiognomy) and have been refined from the international standards developed by the United nations Educational, Scientific, and Cultural Organization (UNESCO). The two most detailed levels of the hierarchy are based on the species composition of existing vegetation (floristics) and reflect the phyto-sociological standards that were originally developed by European ecologists. The vegetation classification is continually advanced through the collection and analysis of new field data and will be greatly strengthened during the course of the USGS-NPS mapping efforts. Data file attributes include species, alliance, community element, and land cover.

01,Jack pine - black spruce / feathermoss forest (forest phase)
02,Spruce - fir / feathermoss forest
03,White cedar - boreal conifer mesic forest
04,White cedar - (mixed conifer) / alder swamp (open phase)
05,Black spruce / dwarf-shrub swamp complex
06,White cedar - (mixed conifer) / alder swamp (closed phase)
08,Maple - yellow birch - northern hardwoods forest (sugar maple phase)
09,Maple - yellow birch - northern hardwoods forest (mixed phase)
11,Red oak - sugar maple forest
12,Paper birch / bush honeysuckle - fir forest
13,Aspen - birch / boreal conifer forest (mixed aspen-birch phase)
15,Aspen - birch / sugar maple - mixed hardwoods forest (mixed phase)
17,Black ash - mixed hardwood swamp complex
18,Northern tamarack rich swamp
19,Balsam fir / paper birch forest
20,White spruce - balsam fir - aspen forest
21,White cedar - yellow birch forest (cedar - birch phase)
22,Jack pine - black spruce / feathermoss forest (woodland phase)
23,White spruce woodland alliance
25,Aspen - birch / boreal conifer forest (sparse canopy phase)
26,Common juniper rocky krummholz
27,Boreal rocky shrubland
28,Speckled alder swamp
29,Dwarf shrub fen complex
30,Poverty grass barrens
31,Bluejoint eastern meadow
32,Sedge meadow complex
49,Red maple - ash - birch swamp forest
50,Yellow birch - (spruce) forest
51,Boreal pine rocky woodland
53,Aspen - birch / boreal conifer forest (woodland phase)
54,Spruce - fir and sugar maple - yellow birch mosaic
55,Aspen - birch / sugar maple - mixed hardwoods forest (paper birch phase)
56,White pine - aspen - birch forest
60,Northern (laurentian) igneous / metamorphic moist cliff scrub

61,Great Lakes bedrock lakeshore
63,Great Lakes cobble / gravel lakeshore
67,Great Lakes bedrock lakeshore - (undifferentiated bedrock)
83,White cedar - balsam fir / leatherleaf / black crowberry krummholz
88,Canada yew mixed shrubland
90,Balsam fir woodland
98,Water
99,Urban/built-up
10A,Maple - yellow birch - northern hardwoods forest (yellow birch phase)
16A,Aspen - birch / sugar maple - mixed hardwoods forest (aspen phase)
16B,Aspen - birch / boreal conifer forest (aspen phase)
16C,Aspen - red maple forest
17A,Black ash (cedar) - mixed hardwoods swamp complex
19A,Balsam fir - aspen - paper birch forest
19B,Balsam fir / Canada yew - devils club forest
25A,Aspen - red maple rocky woodland
32A,Sedge / sphagnum meadow complex
50A,White cedar - yellow birch forest (mixed phase)
53A,Spruce - fir - aspen open forest
67A,Great Lakes cobble / gravel lakeshore - (undifferentiated gravel)

Entity_and_Attribute_Detail_Citation:
U.S. National Biological Survey, U.S. National Park Service, Department of the Interior
November 1994, Accuracy Assessment Procedures, NBS/NPS Vegetation Mapping Program,
Denver, CO, USGS, Biological Resources Division, Center for Biological Informatics,
Prepared by: Environmental Systems Research Institute; Redlands, CA and
National Center for Geographic Information and Analysis, University of
California, Santa Barbara, CA and The Nature Conservancy, Arlington, VA
under contract from U.S. Department of the Interior National Biological
Survey and National Park Service.
electronic document
http://biology.usgs.gov/npsveg/aa/aa.html

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Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Format_Name: HTML
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: http://biology.usgs.gov/npsveg/isro/index.html#accuracy_assessment_info
Fees: None

Metadata_Reference_Information:
Metadata_Date: 20010511
Metadata_Review_Date: 20060901
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator
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Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part 1: Biological Data Profile, 1999
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Extensions:
Online_Linkage: http://biology.usgs.gov/fgdc.bio/bionwext.txt
Profile_Name: Biological Data Profile FGDC-STD-001.1-1999